Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-19. (Cancelled)

20. (Currently Amended) A method for operating a drive train of a motor vehicle having a drive motor, a variable speed automatic transmission, and at least one control device for actuating the drive motor, said method comprising:

the control device processing a rotational speed of the drive motor;

when there is an actuated change in rotational speed of the drive motor

from a starting rotational speed to a target rotational speed during a neutral position of
the variable speed transmission, establishing current profile parameters of the change
in rotational speed, based on the rotational speed; and

thereafter, using pre-stored profile parameters and <u>the</u> current profile parameters, determining corrected profile parameters by which a profile of rotational speed of the drive motor in selected operating states is calculated in advance; and

wherein, the corrected profile parameters are determined as a function of at least one of the starting rotational speed and the target rotational speed.

- 21. (Previously Presented) The method as claimed in claim 20, wherein a profile parameter is in the form of a gradient of the change in rotational speed.
- 22. (Previously Presented) The method as claimed in claim 21, wherein a corrected gradient is determined as a function of the difference between the starting rotational speed and the target rotational speed.
- 23. (Previously Presented) A method for operating a drive train of a motor vehicle having a drive motor, variable speed automatic transmission, and at least one control device for actuating the drive motor, said method comprising:

the control device processing a rotational speed of the drive motor;
when there is an actuated change in rotational speed of the drive motor
from a starting rotational speed to a target rotational speed during a neutral position of
the variable speed transmission, establishing a current gradient of the change in
rotational speed;

using a previously stored gradient value and the current gradient, determining a corrected gradient;

establishing a current reaction time as a time period between an actuation time and a time at which a change in a status variable of the drive train exceeds an adjustable limiting value;

determining a corrected reaction time using a previously stored reaction time and the current reaction time; and

calculating in advance a profile of the rotational speed of the drive motor, using the corrected gradient and the corrected reaction time in selected operating states.

- 24. (Previously Presented) The method as claimed in Claim 23, wherein at least one of the corrected gradient and the corrected reaction time is determined as a function of at least one of the starting rotational speed and the target rotational speed.
- 25. (Previously Presented) The method as claimed in Claim 23, wherein the corrected gradient and/or the corrected reaction time are determined by averaging the previously stored values and the current values.
- 26. (Previously Presented) The method as claimed in Claim 25, wherein:

 deviations of at least one of the current gradient and the current reaction
 time from the previously stored values are determined; and

if the deviations exceed adjustable limiting values, the previously stored values are adopted for at least one of the corrected gradient and the corrected reaction time.

- 27. (Previously Presented) The method as claimed in Claim 23, wherein at least one of the corrected gradient and the corrected reaction time is stored and used as previously stored values in the following determination of the corrected gradient or of the corrected reaction time.
- 28. (Previously Presented) The method as claimed in Claim 27, wherein it is established how often at least one of the corrected gradient or the corrected reaction time have been determined, and how often the averages are dependent on the established values.
- 29. (Previously Presented) The method as claimed in Claim 23, wherein the determination of the corrected gradient or of the corrected reaction time is dependent on state variables of the drive train.
- 30. (Previously Presented) The method as claimed in Claim 23, wherein the determination of the corrected gradient or of the corrected reaction time is dependent on actuated manipulated variables of the drive motor.
- 31. (Previously Presented) The method as claimed in Claim 23, wherein the determination of the current gradient or of the current reaction time is carried out during a synchronization operation when there is a change of gear speed of the variable speed transmission.

- 32. (Previously Presented) The method as claimed in Claim 31, wherein a target gear speed is selected when there is a change in gear speed of the variable speed transmission, as a function of at least one of the corrected gradient and of the corrected reaction time.
- 33. (Currently Amended) A method for operating a drive train of a motor vehicle having a drive motor, a variable speed automatic transmission and at least one control device for actuating the drive motor, and for processing a rotational speed of the drive motor, wherein in an initial operation of the drive train:

the control device actuates the drive motor in such a way that changes in rotational speed occur;

profile parameters of the changes in rotational speed are determined, based on the rotational speed; and

the profile parameters which are determined are stored.

34. (Previously Presented) The method as claimed in Claim 33, wherein the profile parameters are in the form of one of:

a reaction time in the sense of a time period between an actuation time and a time at which a change in a state variable of the drive motor exceeds an adjustable limiting value; and

a gradient of the changes in rotational speed.

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- 35. (Previously Presented) The method as claimed in Claim 34, wherein: changes in rotational speed of the drive motor are actuated repeatedly; averages of the profile parameters which occur are formed; and results of the averages are stored.
- 36. (Previously Presented) The method as claimed in Claim 34, wherein the determination of the profile parameters is dependent on at least one of a starting rotational speed and target rotational speed.
- 37. (Previously Presented) The method as claimed in Claim 34, wherein the determination of the profile parameters is dependent on state variables of the drive train.
- 38. (Previously Presented) The method as claimed in Claim 34, wherein the determination of the profile parameters is dependent on actuated manipulated variables of the drive motor.